

ABSTRACT OF THE DISCLOSURE

With regard to a semiconductor apparatus thermally stable in a post process and suitable for fabricating a gate insulator having a laminated structure with various high permittivity oxides and a process of producing the same, in order to achieve high function formation of a gate insulator 8, a silicon nitride film specific inductive capacity of which is approximately twice as much as that of silicon oxide and which is thermally stable and is not provided with Si-H bond, is used as at least a portion of the gate insulator 8. Further, an effective thickness of a gate insulator forming a multilayered structure insulator laminated with a metal oxide having high dielectric constant, in conversion to silicon oxide, can be thinned to less than 3 nm while restraining leakage current.